

The Surface Water Quality Monitoring Guidance Advisory Work Group Meeting

June 8, 2004

Meeting Summary

Welcome and introductions - Patrick Roques

Patrick Roques explained the objectives of this advisory group. They are to provide suggestions to TCEQ for revisions of the Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data. This guidance will be used to prepare the 2006 Texas Water Quality Inventory and 303(d) List. The group will meet three or four times this summer and fall. The next meetings are scheduled for August 5 and September 21 in Austin. TCEQ will prepare a draft document based on our discussions from all of these meetings and hold a 30-day public comment period on the draft in late fall. The 2006 303(d) List is scheduled to be submitted to EPA on April 1, 2006.

Preceding each meeting, a “handout” will be posted on this advisory group’s TCEQ webpage and distributed by email to workgroup members. It will summarize the issues from the previous meeting, propose alternate methods for these issues as well as potential outcomes of using new methods, and introduce new topics for discussion.

An overview of the assessment process and highlights of the 2004 assessment was presented by Patrick Roques including:

- the 2004 303(d) list identifies 731 assessed water bodies, 306 did not support their use, 503 water bodies had water quality concerns
- a second public comment period on the 2004 303(d) List and assessment is delayed until further notice
- the 2006 assessment will use data collected **December 1, 1999 to November 30, 2004**

Revised levels of support for uses and criteria were reviewed including:

- an explanation of current levels of support and their naming conventions
- discontinuing the use of “Partially Supporting” terminology
- the naming convention for the identification of nonsupport with qualitative information - participants suggested more could be done to distinguish listing and support levels from concerns and near-nonattainment

General issues were discussed including:

- minimum number of samples for assessment - participants discussed using less than 10 samples to identify use support and concerns for several parameters
- representative sample sets (time and space) - agency staff discussed the current strategy for siting monitoring stations and the need to represent hydrologically distinct areas in water bodies. Also discussed was the frequency and intervals between sampling events -they should be scheduled to characterize the range of conditions and seasons in a two-year period. Participants discussed the suggestion that up to ten years of data should be considered for TDS assessment.
- characterizing the mixed-surface layer using the median (application of criteria in reservoirs)
- use of a statistically-based approach (binomial) to the listing and delisting of water bodies - TCEQ staff will develop examples of assessment approaches that result in various levels of statistical confidence.

Assessing the dissolved oxygen criteria was discussed including:

- assessing 24-hour dissolved oxygen data sets - Seasonal requirements for data collection and the minimum number of events needed to determine compliance with water quality standards were reviewed.
- compliance with water quality criteria below critical flows - Staff clarified presumptions regarding flow conditions based on observations in the absence of actual measurements.

Fish consumption use was briefly discussed and a handout outlining current practices was distributed. The two topics were:

- identifying concerns and waters that are fully supporting (or no concern) with fish contaminant surveys
- using the TDH risk assessment to identify the contaminants causing impairment

Evaluating compliance with the narrative criteria was discussed briefly and will be continued in one of the next meetings. Staff reviewed recent developments in assessment methods.

Protecting aquatic organisms from toxic sediment was discussed including the use of elutriate tests and a multiple lines of evidence approach. This discussion will be continued at one of the next meetings and alternate proposals will be presented.

Improvements to the assessment process was briefly discussed in particular:

- obtaining readily available and reliable data, and the difficulties of evaluating new large data sets in various formats within the minimal time available at the public comment period
- revising the format for the assessment guidance document to be more readable and to include the 303(d) list development process and time line.

A discussion of issues for review at future meetings included the following requests:

1. Listing water bodies with exceedances of the temperature criterion caused by thermal discharges.
2. Criteria used to assign water bodies to Categories 4b and 4c.
3. Ranking water bodies for TMDL initiation.
4. Threatened/endangered species - role in the listing process.
5. TCEQ's water quality management response/action for water bodies identified with concerns...what happens next?
6. A comparison of sediment screening levels used by TCEQ program.
7. A discussion of the definition of "pollution" as distinguished from non-support caused by a pollutant... relative weight of contributing factor or causes.
8. Use of data generated from statistically-based monitoring designs
9. Assessment of in-stream impoundment areas on streams and headwaters of reservoirs
10. What are the criteria for the reassignment of Category 5c water bodies to other categories?
11. How should exceedances of the pH criteria be listed? Should non-support of other parameters also be reviewed when pH is not supported?
12. How does listing for narrative criteria relate to a TMDL endpoint?

Topics to be continued from June 8 meeting to one of the next meetings:

1. Sediment toxicity...what test(s) are appropriate and the weight of evidence approach
2. Review of fish tissue assessment
3. Binomial approach and changes to listing/de-listing methodologies

4. Reorganization of the guidance/methodology

Other topics to be discussed at future meetings:

1. Data quality objectives and use of data generated by continuous monitoring stations for use in the assessment.
2. Using the New Bacterial Indicators
 - ▶ How has the use of the new bacteria indicators E. coli and Enterococcus changed the number of listed water bodies?
 - ▶ How has TCEQ verified sources of bacterial contamination?
 - ▶ Considerations for the next revision of the Surface Water Quality Standards... determining compliance with the criteria.
- Determining the Appropriate DO Criteria
 - ▶ Improving the flow-status questionnaire
 - ▶ Considerations related to flows sustained by wastewater
 - ▶ DO and other criteria attainment in isolated pools

The next two meetings will take place on August 5 and September 21, 2004. The meeting was adjourned at 4:20 PM.